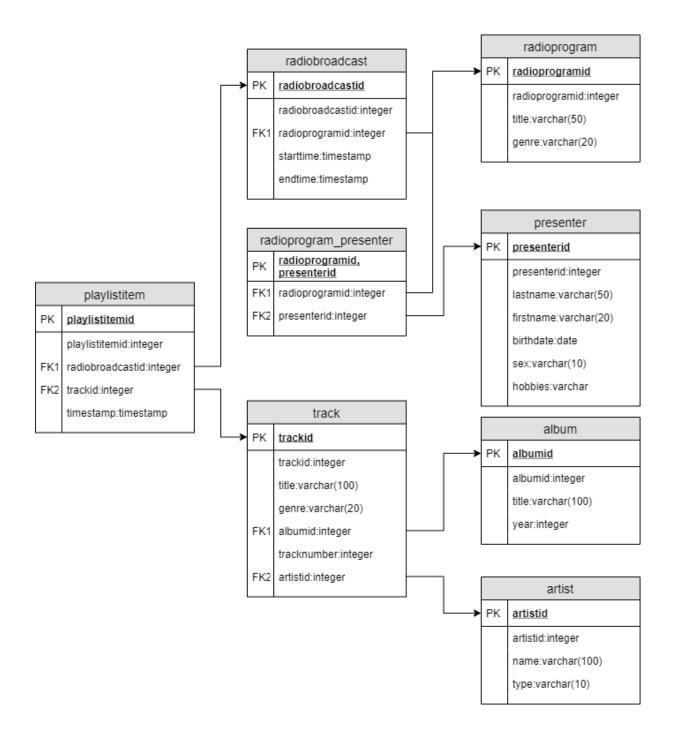
# RELATIONELE SCHEMA'S

#### RADIO DATABANK

Een eerste beschikbare databank bevat data gerelateerd aan een radiozender. De databank bevat, onder andere, het uitzendschema van de programma's van deze zender, een lijst van presentatoren/presentatrices, een lijst van liedjes in hun catalogus en een overzicht van de afspeellijsten.

Hieronder vind je een een relationeel databankschema van de radio databank, waarin tabellen, attributen, datatypes en sleutels worden weergegeven.



### RADIO DDL SCRIPT

Hieronder geven we voor de volledigheid ook nog het DDL script mee voor de aanmaak van de radio databank.

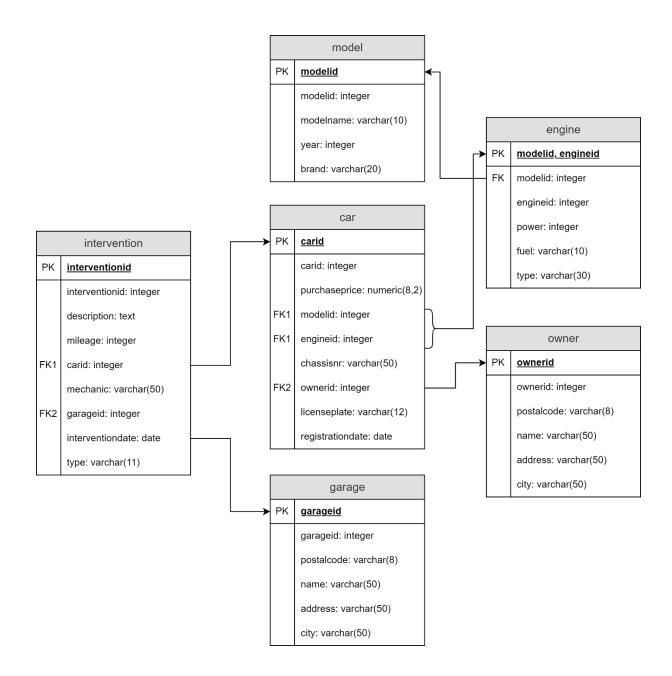
```
CREATE TABLE radio.album
 albumid integer NOT NULL,
 title character varying (100) NOT NULL,
 year integer,
 CONSTRAINT pk album PRIMARY KEY (albumid)
);
CREATE TABLE radio.artist
 artistid integer NOT NULL,
 name character varying (100) NOT NULL,
 type character varying (10),
  CONSTRAINT pk artist PRIMARY KEY (artistid)
CREATE TABLE radio.track
  trackid integer NOT NULL,
 title character varying (100) NOT NULL,
 genre character varying (20) NOT NULL,
 albumid integer NOT NULL,
 tracknumber integer,
 artistid integer NOT NULL,
 CONSTRAINT pk track PRIMARY KEY (trackid),
  CONSTRAINT fk track album FOREIGN KEY (albumid)
      REFERENCES radio.album (albumid)
      ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk track artist FOREIGN KEY (artistid)
      REFERENCES radio.artist (artistid)
      ON UPDATE NO ACTION ON DELETE NO ACTION,
);
CREATE TABLE radio.presenter
 presenterid integer NOT NULL,
  lastname character varying (50) NOT NULL,
  firstname character varying (20) NOT NULL,
 birthdate date NOT NULL,
  sex character varying (10) NOT NULL,
  hobbies varchar NOT NULL,
  CONSTRAINT pk presenter PRIMARY KEY (presenterid)
);
CREATE TABLE radio.radioprogram
 radioprogramid integer NOT NULL,
 title character varying (50) NOT NULL,
 genre character varying (20) NOT NULL,
 CONSTRAINT pk radioprogram PRIMARY KEY (radioprogramid),
  CONSTRAINT unq radioprogram title UNIQUE (title)
);
CREATE TABLE radio.radioprogram presenter
  radioprogramid integer NOT NULL,
```

```
presenterid integer NOT NULL,
 CONSTRAINT pk radioprogram presenter PRIMARY KEY (radioprogramid,
presenterid),
  CONSTRAINT fk radioprogram presenter radioprogram FOREIGN KEY
(radioprogramid)
      REFERENCES radio.radioprogram (radioprogramid)
      ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk radioprogram presenter presenter FOREIGN KEY (presenterid)
      REFERENCES radio.presenter (presenterid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
CREATE TABLE radio.radiobroadcast
 radiobroadcastid integer NOT NULL,
 radioprogramid integer,
  starttime timestamp with time zone NOT NULL,
  endtime timestamp with time zone NOT NULL,
  CONSTRAINT pk radiobroadcast PRIMARY KEY (radiobroadcastid),
  CONSTRAINT fk radiobroadcast radioprogram FOREIGN KEY (radioprogramid)
      REFERENCES radio.radioprogram (radioprogramid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
CREATE TABLE radio.playlistitem
 playlistitemid integer NOT NULL,
 radiobroadcastid integer,
 trackid integer,
  "timestamp" timestamp with time zone NOT NULL,
  CONSTRAINT pk playlistitem PRIMARY KEY (playlistitemid),
  CONSTRAINT fk playlistitem radiobroadcast FOREIGN KEY (playlistitemid)
      REFERENCES radio.playlistitem (playlistitemid)
      ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk_playlistitem_track FOREIGN KEY (trackid)
      REFERENCES radio.track (trackid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
```

## **GARAGE DATABANK**

De tweede beschikbare databank bevat data gerelateerd aan autogarages. De databank bevat, onder andere, een lijst van wagens en eigenaars, een overzicht van de interventies uitgevoerd op de wagens en een overzicht van de garages die deze interventies hebben uitgevoerd.

Hieronder vind je, opnieuw, een een relationeel databankschema van de garage databank, waarin tabellen, attributen, datatypes en sleutels worden weergegeven.



### GARAGE DDL SCRIPT

Hieronder geven we voor de volledigheid ook nog het DDL script mee voor de aanmaak van de garage databank.

```
CREATE TABLE garage.model
 modelid integer NOT NULL,
 modelname character varying (10) NOT NULL,
 year integer NOT NULL,
 brand character varying (20) NOT NULL,
 CONSTRAINT pk model PRIMARY KEY (modelid)
);
CREATE TABLE garage.engine
 power integer NOT NULL,
 modelid integer NOT NULL,
 engineid integer NOT NULL,
  fuel character varying (10) NOT NULL,
  type character varying (30) NOT NULL,
 CONSTRAINT pk engine PRIMARY KEY (modelid, engineid),
 CONSTRAINT fk engine model FOREIGN KEY (modelid)
      REFERENCES garage.model (modelid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
CREATE TABLE garage.owner
 postalcode character varying (8) NOT NULL,
 name character varying (50) NOT NULL,
 address character varying (50) NOT NULL,
 ownerid integer NOT NULL,
 city character varying (50) NOT NULL,
 CONSTRAINT pk owner PRIMARY KEY (ownerid)
);
CREATE TABLE garage.garage
 postalcode character varying(8) NOT NULL,
 name character varying (50) NOT NULL,
 address character varying (50) NOT NULL,
 city character varying (50) NOT NULL,
  garageid integer NOT NULL,
  CONSTRAINT pk garage PRIMARY KEY (garageid)
);
CREATE TABLE garage.car
 purchaseprice numeric (8,2) NOT NULL,
 modelid integer NOT NULL,
  engineid integer NOT NULL,
  chassisnr character varying (50) NOT NULL,
  ownerid integer NOT NULL,
  carid integer NOT NULL,
  licenseplate character varying (12) NOT NULL,
  registrationdate date NOT NULL,
  CONSTRAINT pk_car PRIMARY KEY (carid),
  CONSTRAINT fk_car_engine FOREIGN KEY (modelid, engineid)
      REFERENCES garage.engine (modelid, engineid)
      ON UPDATE NO ACTION ON DELETE NO ACTION,
```

```
CONSTRAINT fk car owner FOREIGN KEY (ownerid)
      REFERENCES garage.owner (ownerid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
CREATE TABLE garage.intervention
  description character varying (200) NOT NULL,
  mileage integer NOT NULL,
  carid integer NOT NULL,
  mechanic character varying (50) NOT NULL,
  garageid integer NOT NULL,
  interventionid integer NOT NULL,
  interventiondate date NOT NULL,
  type character varying(11) NOT NULL,
  CONSTRAINT pk intervention PRIMARY KEY (interventionid),
  CONSTRAINT fk intervention car FOREIGN KEY (carid)
      {\tt REFERENCES} \  \, {\tt garage.car} \  \, \overline{\tt (carid)}
      ON UPDATE NO ACTION ON DELETE NO ACTION,
  CONSTRAINT fk intervention garage FOREIGN KEY (garageid)
      REFERENCES garage.garage (garageid)
      ON UPDATE NO ACTION ON DELETE NO ACTION
);
```